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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,997	01/29/2004	Shinpei Okajima	SN-US035209	2012

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EXAMINER

BELLINGER, JASON R

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,997

Applicant(s)

OKAJIMA, SHINPEI

Examiner

Jason R Bellinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/27/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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Drawings

1. The drawings were received on 3 December 2004. These drawings are approved.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3, 8-9, 12-16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owen et al in view of Dixon et al. Owen et al shows a bicycle rim **b** having an annular spoke attachment portion **g** including a plurality of circumferential spaced spoke attachment openings, each having a central axis. A plurality of reinforcement members **c**, each having a base section **k**, is fixedly coupled to the spoke attachment portion **g** at the spoke attachment openings to effectively increase the thickness of the spoke attachment portion **g**.

Each of the reinforcement members **c** is bonded (welded) to the spoke attachment portion **g** (see lines 30-34), by melting metal to form a bond between the outer surface of the spoke attachment portion **g** and the base section **k**. While Owen et al does not specify the bond formed between the reinforcement member **c** and the outer surface of the spoke attachment portion **g** is formed by brazing, both welding and brazing are well known in the art as being similar methods of forming a permanent bond between metals involving melting metal to form the bond, therefore it would have been

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obvious to one of ordinary skill at the time of the invention to braze the reinforcement members to the rim as an equivalent method of providing a permanent bond between the reinforcement members and the rim, dependent upon what bonding materials and equipment is available, and cost.

Each reinforcement member **c** includes a rim-facing surface contacting an outer surface of the spoke attachment portion **g**, an exterior facing surface that faces in an opposite direction from the rim facing surface, and a through opening extending that is aligned with one of the spoke attachment openings.

Each reinforcement member **c** has an annular peripheral edge defined by the base section **k** that defined a step between the base section **k** and the outer surface of the spoke attachment portion **g**. The annular peripheral edges include a tapering part (namely the shape of the side portions of the base **k**) and a radial part (the portion of the edge that forms the step).

The rim facing surface of each reinforcement member **c** has a U-shaped contour in the axial direction of the rim **b** to match an exterior contour of the outer surface of the spoke attachment portion **g**. Each reinforcement member **c** is integrally formed as a one-piece, unitary member. The attachment openings are formed in an inner annular section of the spoke attachment portion **g** that forms an inner radial periphery of the rim **b**, such that the central axes of the spoke attachment openings extend in a substantially radial direction of the rim **b**.

Each reinforcement member **c** has a maximum overlapping dimension that overlaps the annular spoke attachment portion **g** as measured from an outer peripheral

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edge to a respective spoke attachment opening. The maximum overlapping dimension is at least half as large as a maximum transverse dimension of the spoke attachment openings.

Owen et al does not show a rim having a tire attachment portion or the spoke attachment portion including a pair of annular side sections and an inner annular section to form a substantially U-shaped cross-sectional shape with an annular hollow area.

Dixon et al teaches the use of a rim 1 having a spoke attachment portion with a pair of annular side portions and an inner annular section that forms a generally U-shaped cross-sectional shape with an annular hollow area. The tire attachment portion includes an annular bridge section that extends between a pair of annular tire support sections to form a substantially U-shaped cross-section. The tire attachment portion and the spoke attachment portion are fixedly coupled together. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the rim of Owen et al with the shape as taught by Dixon et al for the purpose of allowing a pneumatic tire to be mounted on the rim, and to reduce the weight of the rim.

4. Claims 4-7 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owen et al in view of Dixon et al as applied to claims 1-3, 8-9, 12-16, and 20 above, and further in view of Terry. Owen et al as modified by Dixon et al shows each reinforcement member **c** has an annular peripheral edge defined by the base section **k** that defined a step between the base section **k** and the outer surface of the spoke

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attachment portion **g**. The annular peripheral edges include a tapering part (namely the shape of the side portions of the base **k**) and a radial part (the portion of the edge that forms the step). However, Owen et al as modified by Dixon et al does not show the reinforcement members having a tubular section extending through one of the attachment openings of the spoke attachment portion.

Terry teaches the use of a reinforcement member **F** that includes a tubular section **f** extending through the attachment opening of a spoke attachment portion of a rim **H**. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the reinforcement members of Owen et al as modified by Dixon et al for the purpose of positively locating each reinforcement member within the attachment openings of the spoke attachment portion prior to welding, thus preventing any undue strain on spokes mounted to the rim.

Owen et al as modified by Dixon et al and Terry does not show the tubular section of the reinforcement member having internal threads formed therein. Terry does show an additional insert **E** having internal threads **e** for securing the spokes **D**. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the internal threads in the tubular section without including the additional insert **E**, for the purpose of reducing the number of parts required to attach the spokes to the rim.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Owen et al in view of Dixon et al as applied to claims 1-3, 8-9, 12-16, and 20 above, and further

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in view of Lacombe et al. Owen as modified by Dixon et al does not show the annular bridge section of the rim being free of openings except for a single valve aperture.

Lacombe et al teaches the use of a bicycle rim having an annular bridge section devoid of any openings except for a valve opening. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the bridge section of the rim of Owen et al as modified by Dixon et al for the purpose of providing an airtight and easily sealable rim.

6. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owen et al in view of Dixon et al and Lacombe et al as applied to claim 17 above, and further in view of Terry. Owen et al as modified by Dixon et al and Lacombe et al does not show the reinforcement members having a tubular section extending through one of the attachment openings of the spoke attachment portion.

Terry teaches the use of a reinforcement member **F** that includes a tubular section **f** extending through the attachment opening of a spoke attachment portion of a rim **H**. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the reinforcement members of Owen et al as modified by Dixon et al for the purpose of positively locating each reinforcement member within the attachment openings of the spoke attachment portion prior to welding, thus preventing any undue strain on spokes mounted to the rim.

Owen et al as modified by Dixon et al and Terry does not show the tubular section of the reinforcement member having internal threads formed therein. Terry does

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show an additional insert **E** having internal threads **e** for securing the spokes **D**.

Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the internal threads in the tubular section without including the additional insert **E**, for the purpose of reducing the number of parts required to attach the spokes to the rim.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1, 4, 14, 16, and 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 6, 17, and 18, respectively, of copending Application No. 10/430,396. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the limitations of the instant claims are included in the copending claims. The instant claims are broader in scope than the copending claims, and it is therefore obvious that the Applicant is claiming the same invention in broader terms. This is a

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provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. See *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

Response to Arguments

9. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's arguments filed 3 December 2004 have been fully considered but they are not persuasive. Claims 1, 4, 14, and 16-17 are still considered to be describing essentially the same subject matter as claims 1, 2, 6, and 17-18, respectively of copending application 10/430,396. Therefore, the aforementioned claims continue to be provisionally rejected under the nonstatutory double patenting rules (see paragraph 8 above).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show wheels having reinforcing members attached to the rim at the spoke mounting portions. For example, Murray shows a wheel of the type described above.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R Bellinger whose telephone number is 703-308-6298. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger
Examiner
Art Unit 3617

JASON R. BELLINGER
PATENT EXAMINER

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